

COPY FOR IB

PCT/KR2005/000051

PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

REC'D 10 MAY 2005

WIPO PCT

To:

KIM, Seong-Nam

17th Floor, City Air Tower 159-9 Samsung-dong, Gangnam-gu, Seoul 135-973 Republic of Korea

21/7

PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) 29 APRIL 2005 (29.04.2005)

Applicant's or agent's file reference  
OS040033

FOR FURTHER ACTION  
See paragraph 2 below

International application No.  
**PCT/KR2005/000051**

International filing date (day/month/year)  
**07 JANUARY 2005 (07.01.2005)**

Priority date(day/month/year)  
08 JANUARY 2004 (08.01.2004)

International Patent Classification (IPC) or both national classification and IPC  
**IPC7 H04B 7/26**

Applicant

**SK TELECOM CO., LTD. et al**

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.  
For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



Korean Intellectual Property Office  
920 Dunsan-dong, Seo-gu, Daejeon 302-701,  
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

SHIN, Jun Ho

Telephone No. 82-42-481-8129



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2005/000051

**Box No. I Basis of this opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing  
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format  
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2005/000051

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	1 - 15	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	1 - 15	YES
	Claims	NONE	NO
Industrial applicability (IA)	Claims	1 - 15	YES
	Claims	NONE	NO

**2. Citations and explanations :**

**1. NOVELTY AND INVENTIVE STEP**

Reference is made to the following documents:

- D1 : US 2002/0068565 A1 ( RENE PURNADI ET AL. ) 6 June 2002  
D2 : WO 2003/052970 A2 ( QUALCOMM INCORPORATED ) 26 June 2003  
D3 : WO 2000/51393 A1 ( QUALCOMM INCORPORATED ) 31 August 2000  
D4 : EP 1104974 A2 ( HYUNDAI ELECTRONICS INDUSTRIES CO., LTD. ) 6 June 2001

Claims 1-15 discloses a handoff method between asynchronous and synchronous networks, wherein a gateway GPRS support node (GGSN) of the asynchronous network is connected to a packet data service node (PDSN) of the synchronous network. As a mobile communication terminal which uses packet data service in the asynchronous mobile communication system moves into an area of a synchronous mobile communication system, the synchronous mobile communication system sets control signals and traffic to transmit packet data in response to a request from the asynchronous mobile communication system. Further, if forward and reverse channels are assigned between the mobile communication terminal and the synchronous mobile communication system, call setup is performed to provide the packet data service, and then a node B of the asynchronous mobile communication system releases the connection to the mobile communication terminal.

D1 discloses a GPRS packet-switched core network connected to a cdma2000 wireless access network by using a wireless gateway which is connected between serving GPRS service nodes (SGSNs). However, D1 discloses a handoff method between the base stations of cdma2000 packet data system.

(Continued on Supplemental Box)

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2005/000051

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

(Continuation of Box No. V)

D2 discloses a method for data packet transport between a CDMA radio access network and a GSM core infrastructure using a switch that acts on the CDMA side as a PDSN element and on the GSM side as a SGSN element.

D3 and D4 relate to a fast link setup method during the handoff between synchronous base station and asynchronous base station.

The prior arts do not disclose the subject matter of claims 1-15 and even though the prior arts may be combined, it is not obvious to a skilled person in a telecommunication system to derive the subject matter of claims 1-15 from the prior arts. Therefore, the subject matter of claims 1-15 is considered to meet the requirements of PCT Article 33(2) and 33(3) in respect of novelty and inventive step.

**2. INDUSTRIAL APPLICABILITY**

The subject matter of claims 1-15 is considered to meet the requirement of PCT Article 33(4) in respect of industrial applicability.